NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 6, 1994

Mr. Robert Sachse, President Mid America Pipeline Company 1800 S. Baltimore P.O. Box 645 Tulsa, Oklahoma 74101-0645

CPF No. 34528-M

Dear Mr. Sachse:

On June 21-22, 1994, representatives of the Central Region, Southwest Region, and Western Region, Office of Pipeline Safety (OPS), pursuant to Section 211(c) of the Hazardous Liquid Pipeline Safety Act of 1979, 49 U.S.C. app. § 2001 et seq. (HLPSA) visited the Mid America Pipeline Company (MAPCO) Headquarters in Tulsa, Oklahoma, and conducted a joint inspection of the written procedures for conducting normal operations and maintenance procedures, and handling abnormal operations and emergencies. These procedures are required under Title 49, Code of Federal Regulations, Part 195, Section 195.402(a), for each pipeline operator.

As a result of this inspection, it appears that MAPCO has committed probable violations of the HLPSA regulations, 49 CFR Part 195. The items inspected and probable violations are as follows:

- 1. § 195.402 Procedural manual for operations, maintenance, and emergencies.
 - (a) Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and

appropriate changes made as necessary to insure that the manual is effective.

The current statements in the Manual which state "in compliance with 49 CFR Part 195...." must be used only as references. These are minimum performance specifications and do not contain specific instructions. Procedures must be detailed and specific to the task involved.

MAPCO made major revisions to their existing manual and reissued it in mid April 1994. However, the joint OPS comprehensive review of the manual disclosed deficiencies, as noted in Items 2 through 16, which could make the manual ineffective.

- 2. § 195.402(c) Maintenance and normal operations.
 - (1) Making construction records, maps, and operating history available as necessary for safe operation and maintenance.

Item 1 in Section 3, page 6, of MAPCO's procedure manual, states "The amount, location and cover of each size pipe installed." The statement should be modified to read "The amount, location, and cover (at the time of installation) of each pipe size installed."

- 3. § 195.402(c) Maintenance and normal operations.
 - (3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart.

As noted in Items 4 through 13, MAPCO's procedures contained deficiencies for operating, maintaining, and repairing its pipelines.

- 4. § 195.226 Welding: Arc burns.
 - (a) Each arc burn must be repaired.
 - (b) An arc burn may be repaired by completely removing the notch by grinding, if the grinding does not reduce the remaining wall thickness to less than the minimum thickness required by the tolerances in the specification to which the pipe is manufactured. If a

notch is not repairable by grinding, a cylinder of the pipe containing the entire notch must be removed.

MAPCO's Procedural manual must be expanded to include procedures for removal or repair of arc burns.

(c) A ground may not be welded to the pipe or fitting that is being welded.

MAPCO's Procedural Manual must include a procedure for attachment of the welding lead ground, by method other than by welding to pipe or fitting.

- 5. § 195.230 Welds: Repair or removal of defects.
 - (a) Each weld that is unacceptable under § 195.228 must be removed or repaired. Except for welds on an offshore pipeline being installed from a pipelay vessel, a weld must be removed if it has a crack that is more than 8 percent of the weld length.

MAPCO's welding procedures must include a procedure for removal or repair of defective welds. Where remedial welding is used for repair, the actual welding procedure must be qualified and included in the manual.

- 6. § 195.310 Records.
 - (a) A record must be made of each hydrostatic test required by this subpart, and the record of the latest test must be retained as long as the facility tested is in use.

In Section 4, page 17 of the Procedure Manual, include a reference to Section 4, page 20, which lists the required records to be retained for a hydrostatic test. Also in Section 4, page 17 of the Procedure Manual, include reference to hydrostatic test information in Section 12 of the Pipeline Standards Manual.

- 7. § 195.410 Line markers.
 - (1) Markers must be located at each public road crossing, at each railroad crossing, and in sufficient number along the remainder of each buried line so that its location is accurately known.

Information in Section 4, page 24 of the MAPCO procedure manual, must be expanded to include instructions for installation of pipeline marker signs on both sides of a public road or railroad crossing. Also in regard to maintenance of the signs, the procedure must include a specific time deadline for repair or replacement after discovery of damage or need for maintenance.

8. § 195.414 Cathodic protection.

(a) No operator may operate a hazardous liquid interstate pipeline after March 31, 1973, or a hazardous liquid intrastate pipeline after October 19, 1988, or a carbon dioxide pipeline after July 12, 1993 that has an effective external surface coating material, unless that pipeline is cathodically protected.

The last paragraph of page 8 in Section 2 of the procedures manual needs to be reworded to include instructions that cathodic protection shall be installed and operating within one year after installation of a facility.

The procedure must also address deficiencies in a cathodically protected system and include information that deficiencies must be mitigated prior to the next scheduled inspection of the facility and within the permitted inspection interval, or within an earlier time period selected by MAPCO.

In Section 2, page 9, of MAPCO's Procedure Manual, the third paragraph must be specific as to the NACE reference. During the inspection and conversations with MAPCO's Corrosion Control Engineer it was determined that the reference is NACE Standard RPO169-92.

It was also discussed that a statement would be included in the procedures that when cathodic protection potentials were marginal at $-0.85~\rm vdc$, further investigation and consideration of IR drop would be undertaken.

9. § 195.420 Valve maintenance.

(b) Each operator shall, at intervals not exceeding 7 1/2 months, but at least twice each calendar year, inspect each mainline valve to determine that it is functioning properly.

Section 4, page 26 of MAPCO's Procedure Manual is deficient

in that the Mainline Valve Inspection Report does not include columns or space for the specific items inspected on the valve or space for remarks if deficiencies or repairs are needed. This information is necessary to verify the areas of the valve that are inspected and for the maintenance history of each mainline valve.

10. § 195.422 Pipeline repairs.

- (b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.
- 1) Section 4, page 33 of the Procedure Manual must be revised to include procedures for marking, tracking, and identification of pretested pipe used for repairs. The procedure must require information pertaining to pipe grade, wall thickness, seam type, test pressure, manufacturer, and any additional information which will ensure that the pretested pipe will be used in the correct application.
- 2) Also pertaining to repairs (weld+ends), it was noted in Section 10, page 1 of the Standards Manual:

"If in any instance there may be a fire hazard, or having to wait a great length of time for vapors to dissipate, then the new section shall be put in with "weld+end" couplings. After the line is back in service and pressured up to 200 lbs. and not over 500 lbs., the couplings then can be welded to make permanent repairs".

Instructions for installation of weld+ends in the manufacturer's installation procedures are specific as to the pressure that the pipeline can be exposed to prior to welding the weld+end without anchoring. As an example, 10 inch diameter pipe operation is limited to 396 psi prior to welding or anchoring. The limitation on 12 inch diameter pipe is 328 psi. If either of the above diameters were pressured to 500 psi as listed in the Standards Manual, the pressure limitations would be greatly exceeded and could result in a serious accident. The MAPCO Standards Manual must be revised to reflect pressure limitations for specific pipe diameters when installing weld+ends.

11. § 195.426 Scraper and sphere facilities.

No operator may use a launcher or receiver that is not

equipped with a relief device capable of safely relieving pressure in the barrel before insertion or removal of scrapers or spheres. The operator must use a suitable device to indicate that pressure has been relieved in the barrel or must provide a means to prevent insertion or removal of scrapers or spheres if pressure has not been relieved in the barrel.

In Section 3, page 6 of the MAPCO Procedural Manual the scraper trap operation instructions must include a generic drawing of a scraper trap with pertinent components identified. This component identification must be cross referenced with the operating instructions so as to provide specifity for scraper trap operations.

12. § 195.428 Overpressure safety devices.

(a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7 1/2 months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

§ 195.404(c) requires inspection records be maintained for the inspections described in § 195.428 above. Section 4, page 31 of MAPCO's Procedural Manual references recording inspections and tests. The inspection form (Sample P) at the end of Section 4 must be expanded to include space for comments relating to deficiencies and/or repairs of the devices.

13. § 195.432 Breakout tanks.

Each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, inspect each breakout tank (including atmospheric and pressure tanks).

§ 195.404(c) requires inspection records be maintained for the inspections described in § 195.432 above. Section 7,

page 1 of MAPCO's Procedural Manual references recording inspections but no form for recording inspections was found in the manual.

14. § 195.402(c) Maintenance and normal operations.

(6) Starting up and shutting down any part of the pipeline system in a manner designed to assure operation within the limits prescribed by paragraph 195.406, consider the hazardous liquid or carbon dioxide in transportation, variations in altitude along the pipeline, and pressure monitoring and control devices.

Section 4, page 35 of MAPCO's Procedural Manual states: "Operating conditions during startup or shutdown will always remain within the limits prescribed by 49 CFR Part 195.406". This statement is a minimum performance specification and does not contain specific instructions. As noted in Item 1 of this document, procedures must be detailed and specific to the task and therefore include the permissible limits.

15. § 195.402(c).

(11) Minimizing the likelihood of accidental ignition of vapors in areas near facilities identified under paragraph (c)(4) of this section where the potential exists for the presence of flammable liquids or gases.

Section 2, page 1 of MAPCO's Procedural Manual, "Blowdowns" needs to refer to Section 3, page 13 of the manual to tie in blowdown operations to areas that are identified under paragraph (c)(4) of this section. Also specific reference to prevention of accidental ignition for areas identified under paragraph (c)(4), for releases other than controlled blowdowns, must be included in the information in Section 3, page 13.

16. § 195.402(e).

(3) Having personnel, equipment, instruments, tools, and material available as needed at the scene of an emergency.

Procedural manual needs reference to locations and inventory of equipment and materials that would be used in response to an emergency. If outside contractors are used to assist MAPCO, reference to specific contractors including contact

person, phone number, location, and services to be provided must also be included.

When it is found that an operator's procedures are inadequate, § 195.402(b) provides that the operator, after notice and opportunity for hearing as provided in 49 CFR § 190.237, may be required to amend its plans and procedures. This letter serves to provide you with the notice of the inadequate procedures and response options as prescribed under § 190.237. The operator is allowed thirty (30) days after receipt of such notice to submit written comments or request an informal hearing. After considering the material presented, the Office of Pipeline Safety is required to notify the operator of the required amendment or withdraw the notice proposing the amendment. If you do not desire to contest the notice, you must prepare the revised procedures and provide a copy to the Director, Central Region, within thirty (30) days of receipt of this notice.

Sincerely,

Ivan A. Huntoon
Director, Central Region
Office of Pipeline Safety

Attachment

cc: Southern Region Southwest Region Western Region